300μJ Microchip Laser Module

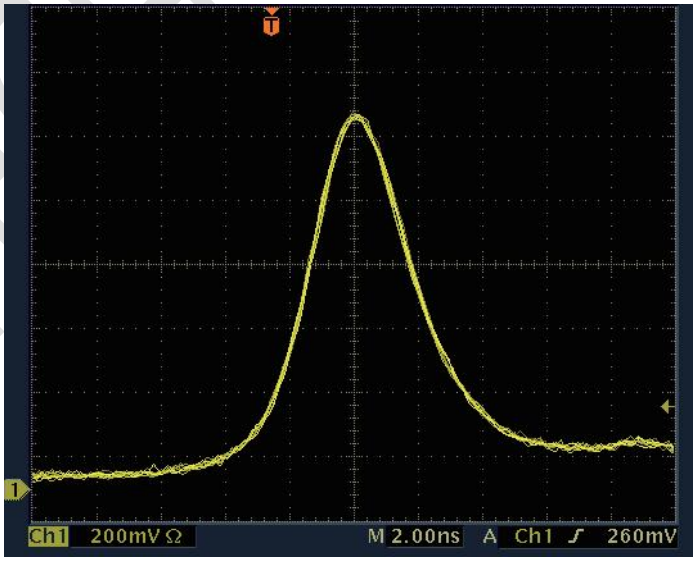
Model:ER300

PRODUCT DESCRIPTION

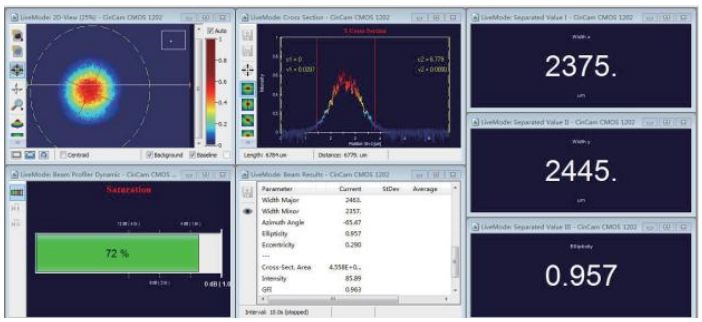
The Erbium Glass Laser is a type of laser that utilizes erbium as the activating ion and ytterbium as the sensitizer in a laser glass medium. ERDI has developed and produced a 1535nm Microchip Laser Module that incorporates a proprietary erbium-doped glass with a refractive index of 1.54 μm and doping concentrations of erbium $(0.1\sim3.0)\times10^{19}$and ytterbium $(1.5\sim3.0)\times10^{21}$, resulting in a fluorescent lifetime of 8~10ms.Widely used in laser ranging, laser irradiation, LIDAR, target recognition, laser medicine, fiber optic communication.

TECHNICAL SPECIFICATIONS

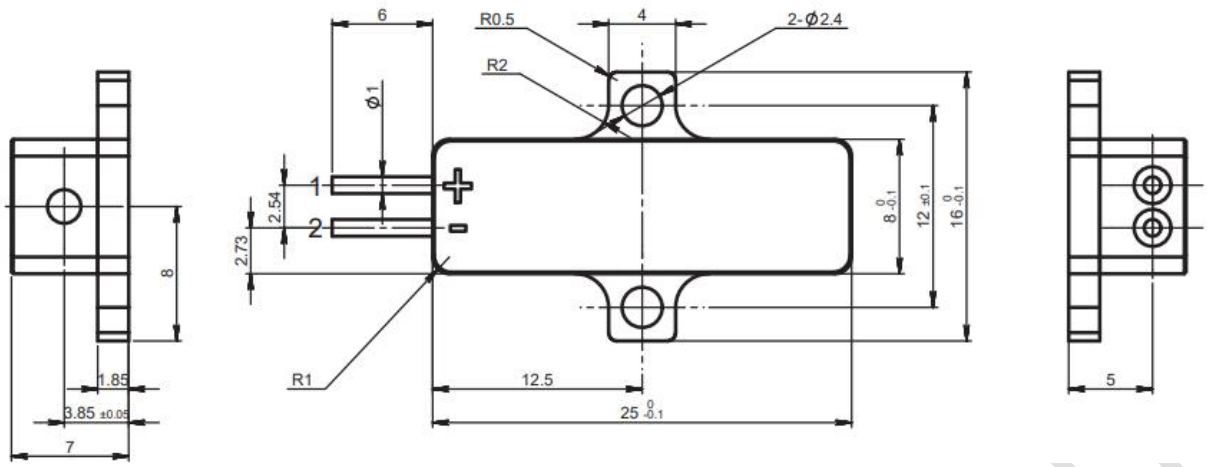
Laser Wavelength	1535 nm
Eyesafe	Class 1
Pulse energy	≥300 μJ
Laser Pulse width	4 ns
Pulse repetition rate	1~10 Hz
Pulse stability	10%
Raw Beam Diameter	0 .2 mm
Beam divergence angle	10 mrad
Beam Mode	TEM_{00}
Operating temperature	-45 ℃~+65 ℃
Storage temperature	-55 ℃~+85 ℃
Impact	1500 G, 0 . 5 ms
Vibration	20~2000 Hz/20 G
Life span	＞5 million times
Dimension (mm)	25x8x7
weight	8 g
Voltage	2 V
electric current	12 A
Drive pulse width	≥2.5 ms



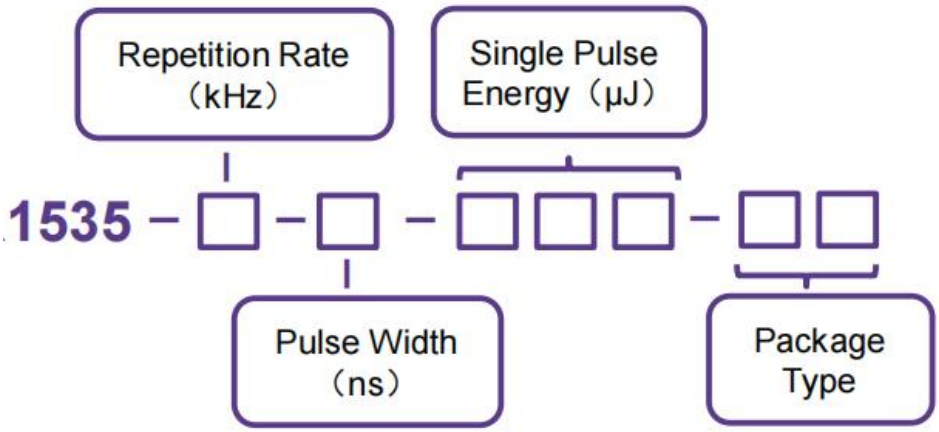
Beam Profile



MECHANICAL DIMENSION(mm)



PART NUMBERING SCHEMA



PIN DESCRIPTIONS

Pin	Function
1	Laser (+)
2	Laser (-)